

We Claim:

1. A method for measuring competitive binding activity of molecules to nuclear receptors, comprising:
 - a) mixing a fluorescence-emitting compound that specifically binds to steroid hormone receptors in a solution wherein the fluorescence-emitting compound is in concentration below the dissociation constant and the steroid hormone receptors are at or above the dissociation constant.
 - b) measuring the binding by fluorescence polarization of the solution from step a);
 - c) incubating the solution of step a) with at least one molecule that may compete with the compound for binding interaction with the steroid hormone receptors;
 - d) measuring the fluorescence polarization of the solution during step c); and, comparing the binding fluorescence polarization measurements of step b) with step d) to quantify any competitive interaction.
2. The process of claim 1 wherein the nuclear receptors include a receptor selected from the group consisting of PPAR, SXR, FXR, LXR, RXR, RAR, and TR.
3. The process of claim 1 wherein the nuclear receptor is activated by ligands other than steroids.
4. The process of claim 1 wherein the nuclear receptor is selected from the group consisting of ER, PR, and GR.
5. The process of claim 1 wherein the nuclear receptor is selected from the group consisting of MR, AR, and ERR.

6. The process of claim 1 wherein the nuclear receptor is selected from the group consisting of nuclear receptor proteins produced in bacteria or eukaryotic cells.
7. The process of claim 1 wherein the nuclear receptor is selected from the group consisting of receptors produced without the addition of ligands to a culture medium.
8. The process of claim 1 wherein the nuclear receptor is selected from the group consisting of ligand binding domains alone or fused to domains such as GST, MBP, and TRX.
9. The process of claim 1 wherein the nuclear receptor is selected from the group consisting of full length receptors, ligand binding domains and ligand binding domains fused to GST, MBP, and TRX.
10. The process of claim 1 wherein the fluorescence emitting compound consists of fluorescein, rhodamine, and inherently fluorescent molecules that bind to receptors.
11. The process of claim 1 wherein the fluorescence emitting compound consists of a non-steroidal molecule.
12. The process of claim 11 wherein the non-steroidal molecule consists of a peptide derived from transcriptional coregulator proteins that bind to specific sites on receptors.
13. The process of claim 1 wherein the fluorescence emitting compound is a compound selected from the group consisting of AF-1 domain and DNA binding domain.

14. The process of claim 1 wherein the process is performed in multiwell plates.
15. The process of claim 1 wherein more than one receptor is assayed.

FIG. 4B